

REMARKS

Applicants thank the Examiner for the thorough examination given the present application.

Status of the Claims

Claims 1, 3, 6-18, and 23-29 will be pending in the above-identified application upon entry of the present amendment. Claims 6-18 are currently withdrawn from consideration. Claims 1, 3, and 23-29 stand ready for further action on the merits. Claims 1 and 3 have been amended by incorporating the subject matter of claim 5. Further support for the recitations in claim 1 can be found in the present specification, *inter alia*, at page 38. Claim 4 has been cancelled herein. Claims 23-30 have been added. Support for new claims 23-24 can be found in the present specification, *inter alia*, at pages 37-38. Support for new claim 25 can be found in claim 1. Support for new claims 26-27 can be found in the present specification, *inter alia*, at page 26. Support for new claims 28-29 can be found in the present specification, *inter alia*, at page 28. Thus, no new matter has been added. Based upon the above considerations, entry of the present amendment is respectfully requested.

In view of the following remarks, Applicants respectfully request that the Examiner withdraw all rejections and allow the currently pending claims.

Issues under 35 U.S.C. § 103(a)

The Examiner has rejected claims 1 and 3-4 under 35 U.S.C. § 103(a) as being unpatentable over Auweter et al. '892 (WO 02/26892) (but uses US 2003/0177943 as an English translation) as evidenced by Smook (Handbook of Pulp and Paper Technology).

Applicants respectfully traverse, and reconsideration and withdrawal of the rejection are respectfully requested based on the following considerations.

Legal Standard for Determining Prima Facie Obviousness

MPEP 2141 sets forth the guidelines in determining obviousness. First, the Examiner has to take into account the factual inquiries set forth in *Graham v. John Deere*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), which has provided the controlling framework for an obviousness analysis. The four *Graham* factors are:

- (a) determining the scope and content of the prior art;
- (b) ascertaining the differences between the prior art and the claims in issue;
- (c) resolving the level of ordinary skill in the pertinent art; and
- (d) evaluating any evidence of secondary considerations.

Graham v. John Deere, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966).

Second, the Examiner has to provide some rationale for determining obviousness. MPEP 2143 sets forth some rationales that were established in the recent decision of *KSR International Co. v Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007). Exemplary rationales that may support a conclusion of obviousness include:

- (a) combining prior art elements according to known methods to yield predictable results;
- (b) simple substitution of one known element for another to obtain predictable results;
- (c) use of known technique to improve similar devices (methods, or products) in the same way;
- (d) applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- (e) “obvious to try” – choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success
- (f) known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art;
- (g) some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

As the MPEP directs, all claim limitations must be considered in view of the cited prior art in order to establish a *prima facie* case of obviousness. *See* MPEP 2143.03.

Distinctions over the Cited References

The pigment particles disclosed in Auweter et al. '892 are used for ink applied to inkjet printing. Auweter et al. '892 fail to disclose pulp production. As such, the Auweter et al. '892 reference is different in technical art from a paper manufacturing additive of the present invention. Specifically, the pulp sheet of the present invention is supposed to be a support material or cellulose as disclosed in paragraphs [0146]-[0147] of Auweter et al. '892.

On pages 4-5 of the outstanding Office Action, the Examiner states, "Alternatively, the pigment compositions include pigments typically used as fillers and colorants for paper...and it would have been obvious to use the compositions in the manufacture of pigmented and filled paper." However, adding an ink composition for inkjet printing as a pigment to a paper-manufacturing step is disadvantageous in view of the technology and cost. One of ordinary skill in the art knows that a pigment used in the manufacturing of a pulp sheet is generally pigment particles having an average diameter of about 10 μm . When the diameter of the pigment is smaller than 10 μm , the pigment remains in the produced pulp sheet in a small amount. As such, the yield rate is worse.

Auweter et al. '892 disclose that the pigment has to be fine and small and that the average diameter is of the nanometer order (claim 7; paragraphs [0093], [0140], [0165], [0169], [0171], [0173], [0175], [0177], and [0180]). Using pigment particles having so small a diameter is opposite to the common knowledge of a person skilled in the art of pulp sheet manufacturing. Applying the pigment particles having so small a diameter will make the yield rate of the pulp sheet worse.

Furthermore, amended claim 1 recites that "the powder composition has an average particle diameter of 10 to 700 μm ." In contrast, Auweter et al. '892 disclose an upper limit of 5 μm (paragraph [0140]).

To establish a *prima facie* case of obviousness of a claimed invention, all of the claim limitations must be disclosed by the cited references. As discussed above, Auweter et al. '892 as evidenced by Smook fail to disclose all of the claim limitations of independent claim 1, and those claims dependent thereon. Accordingly, the combination of references does not render the present invention obvious.

Furthermore, the cited references or the knowledge in the art provide no reason or rationale that would allow one of ordinary skill in the art to arrive at the present invention as claimed. Therefore, a *prima facie* case of obviousness has not been established, and withdrawal of the outstanding rejection is respectfully requested. Any contentions of the USPTO to the contrary must be reconsidered at present.

New Claims 23-29

Applicants have newly added claims 23-29 in an effort to further define the scope of protection owed to Applicants. Applicants respectfully submit that claims 23-29 are allowable for the reasons given above. As such, Applicants respectfully assert that claims 23-29 clearly define over the cited references, and an early action to this effect is earnestly solicited.

CONCLUSION

A full and complete response has been made to all issues as cited in the Office Action. Applicants have taken substantial steps in efforts to advance prosecution of the present application. Thus, Applicants respectfully request that a timely Notice of Allowance issue for the present case clearly indicating that each of claims 1, 3, and 23-29 are allowed and patentable under the provisions of title 35 of the United States Code.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Chad M. Rink, Reg. No. 58,258 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By 

John W. Bailey

Registration No.: 32,881

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicants